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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,751	08/21/2008	Gianfranco Bedetti	9526-98 (195017)	3729
30448	7590	12/22/2011		
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER PENNY, TABATHA L	
			ART UNIT	PAPER NUMBER
			1712	
			NOTIFICATION DATE	DELIVERY MODE
			12/22/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip@akerman.com

Office Action Summary

Application No.

10/599,751

Applicant(s)

BEDETTI, GIANFRANCO

Examiner

TABATHA PENNY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-5 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-5 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-832)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/2011.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/29/2011 has been entered.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedetti (WIPO Publication WO 02074427A2) in view of Kuo (US Patent No. 4426936) and Williams (US 3417975).

Regarding claim 1, Bedetti describes a fluid bed granulation process of a predetermined substance comprising: forming through a continuous fluidification air flow of a predetermined flow rate (pg. 6 ln. 3-9), a fluid bed of granules of the substance to be granulated, fed to it in form of seeds (abstract); feeding said fluid bed with a continuous flow of growth substance (pg. 6 ln. 4-7); inducing, in at least part of the fluidification air flow, the formation of a substantially vortex-shaped circulatory movement of the granules of the substance to be granulated in said fluid bed (pg. 6 ln.

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15-33); maintaining and regulating said circulatory movement through said part of the fluidification air flow wherein said substantially vortex-shaped circulatory movement has a substantially horizontal axis (pg. 6 ln. 10-13).

Bedetti does not appear to explicitly disclose the continuous fluidification air flow is divided into a plurality of fractions having respective flow rates comprised between a minimum value flow rate, sufficient to support the fluid bed, fed at the first zone thereof, and a maximum value flow rate, fed in another zone of the same bed, so as to induce and to maintain said substantially vortex-shaped circulatory movement of the granules of said substance. However, Bedetti discloses a vortex flow of material that is generated in the container by a flow of air from distributor 10 attached to the container (page 6, lines 3-14, Fig. 3). Fluidification air of Bedetti is also passed through holes a perforated bottom of the apparatus. The holes in the perforated bottom of the apparatus of Bedetti are uniformly distributed, and are not distributed with increasing density or pitch starting from a long side wall of the container towards an opposite long side wall of the container itself (pg. 9 ln. 3-20). However, Kuo teaches a fluidized bed in which a toroidal (vortex) flow is induced and maintained by altering the distribution of holes in the perforated bottom from a high density to a low density (column 5, lines 27-50, Figs. 2-3). Kuo does not appear to explicitly disclose the flow rates from the perforated bottom is such that the minimum value is sufficient to support the fluid bed and the maximum value is so as to induce and maintain said substantially vortex-shaped circulatory movement of the granules of said substance; however, Kuo teaches

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the flow induces a vortex fluidized bed within the chamber and thus the flow must be between the minimum value and maximum value as claimed.

One of ordinary skill in the art at the time of the invention would therefore have found it prima facie obvious to modify the fluidized bed of Bedetti by distributing the holes in the bottom with increasing density, as taught by Kuo, because said artisan would have appreciated that such a modification would advantageously simplify the apparatus by eliminating the need for the air distributor of Bedetti and said artisan would have had a reasonable expectation of predictably obtaining the coated particles of Bedetti by using distribution of holes.

The combined references do not explicitly teach the increase in density of the holes is done in a continuous manner throughout the bed such that the flow rate of the fluidification air flow varies continuously. However, Williams teaches increasing the aperture/holes (113, Fig. 4) density across the tray from one surface towards an opposing surface in a gradual and continuous manner throughout. Having the configuration described would provide the material located at the higher aperture density area with a high velocity (col. 8 ln. 28-46) therefore one of ordinary skill in the art would expect the increasing an aperture density across the tray as is taught by Williams to yield a decreasing velocity of particles across the tray in a similar manner to that which would be achieved by the air distributor of Bedetti and as a result would form a vortex. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to modify the holes in the fluidized bed of Bedetti and Kuo to have increasing density in a gradual and continuous manner throughout the bed as

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taught by Williams in order to form a vortex flow which would mirror the flow desired by the air distributor of Bedetti and advantageously simplify the apparatus of Bedetti and Kuo by eliminating the need for the air distributor of Bedetti.

Regarding claims 2-3, Williams teaches the pattern of holes in the perforated plate is like that shown in Figure 4. Figure 4 depicts a stepwise, substantially gradual and continuous change in density of holes in the perforated plate throughout the bed (Fig. 4); therefore, Williams inherently discloses the variation in fluidification air flow rates between the maximum and minimum is step-wise as well as substantially gradual and continuous.

Regarding claim 4, Bedetti discloses the granules of substance are made to flow with a substantially helical movement from one end of the fluid bed where a flow of seeds of substance is continually fed, to an opposite end of the fluid bed where a flow of finished granulated product is continually discharged (pg. 7 ln. 14-19 and pg. 5 ln. 14-20).

Regarding claim 5, Bedetti teaches the finished product obtained in said fluid bed is continuously discharged from said fluid bed by gravity (pg. 10 ln. 8-27).

Response to Arguments

3. Applicant's arguments, see amendment, filed 10/14/2011, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bedetti (WIPO Publication WO 02074427A2) in view of Kuo (US Patent No. 4426936) and Williams (US 3417975).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TABATHA PENNY whose telephone number is (571)270-5512. The examiner can normally be reached on Monday thru Friday 8:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/tp/

/Katherine A Bareford/
Primary Examiner, Art Unit 1715